Resident Duty Hour Restrictions: Cost impact

Institute of Medicine Resident Hours Meeting
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Background

- IOM Report on Medical Errors
  - Patient safety
  - Medical errors
- ACGME July 2003 Mandate
  - 80 hours/week
  - Continuous work hours (24 + 6)
  - On call limits (every 3rd day max.)
  - Days off requirement (once/week)
Background

Patient Safety

- No compelling evidence prior to restriction that decreasing work hours lead to safety benefits (1)
- 3 studies published 2007 yielded mixed results on any mortality benefit associated with duty hour restrictions (2,3,4)

3 Volpp KG, et al JAMA 2007;298(9):975-983
4 Volpp KG, et al JAMA 2007;298(9):984-992
Background

- Cost associated with duty hour limits
  - No strong national data available
  - Estimates up to 37% of resident work were over the 80 hour maximum per week
  - Replacement cost 673 million to 2.2 billion dollars annually (1)

Cedars-Sinai Medical Center Experience

- Academic Community Medical Center

  - Mission: Quality care, Medical Research, Medical Education, Community Service
  - 952 Licensed Beds (84 Med/Surg ICUs and 53 Peds/Neonatal ICUs)
  - 50,000 admissions/year
  - 200 full time faculty and 2200 voluntary physicians
  - Primary through tertiary care center
Cedars-Sinai Medical Center
Experience

Research
- 54 million in research grant support in 2007

Medical Education
- 26 ACGME accredited residency and fellowships – 250 trainees
- 100 addition trainees in programs where ACGME does not offer accreditation
Cedars-Sinai Medical Center Experience

- Methods to limit residents’ duty hours
  - Limiting number of patients on teaching services
  - Replacing residents with “mid level substitute)
  - Replace residents with “moonlighting” physicians
  - Hire faculty to run services previously run with residents
Cedars-Sinai Medical Center Experience

Institutional Cost Estimates: Methods

- Contact department chairs and program directors
- Determine any additional FTEs hired since 2003 doing services previously done by residents
- Finance Department gave estimates based on average salary and benefit cost
Cedars-Sinai Medical Center Experience

- Medical ICU night/weekend coverage $555,000
- “Emergency” Hospital wards coverage $500,000
- Labor and Delivery Nurse Practitioners $481,900
- Obstetric night physician coverage $25,600
- Pediatric ICU physician coverage $523,400
- Neonatal physician coverage $51,400
- Pediatric nursery physician coverage $37,800

Total Institutional Cost $2,170,100
Cedars-Sinai Medical Center Experience

- Limitations on ability for cost reimbursement
  - Physician effort and number increased, but billing similar as when resident were supervised caring for similar patient numbers
  - No billing done for advance practice nurse activity
  - "moonlighting" physicians are frequently board certified fellows who can not bill "double dipping"
  - Estimate new reimbursement generated by physicians doing "resident coverage" only $168,000
Cedars-Sinai Medical Center Experience

- Patient safety improvement
  - Multiple changes in all systems since 2003 makes analysis of impact on work hour limitations impossible
Summary and Personal Opinions

The “good" of Resident Work hour restrictions

- Better life quality, less fatigue for trainees
- Effort to improve patient care “hand offs”
- No worsening of patient outcomes, and possibly some improvements
Summary and Personal Opinions

- The “bad” of Resident work hour restrictions
  - Greater focus on work hours at sacrifice of resident education
  - Financial cost are significant and largely non compensated
  - Residents can be punished for “professionalism”
  - Problem of the slow or less efficient resident
  - Some limitations of procedures done in some specialty fields
Summary and Personal Opinions

- No turning back

- More information needed before enacting any further limitations on resident duty hours.